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RESPONSIBILITY

WE are beginning to think educationally in millions, and even tens of millions. The pity is that we do not mix a little thought with our filthy lucre. What is the aim and object of this immense and gigantic expenditure? Are, for instance, the vast sums devoted to Free Education a charitable dole to the poor or a sort of forced ransom paid by the rich; or, is not Free Education itself a right granted by the State, and implying thereby corresponding duties on the part of the recipients? At present the elementary school seems largely to be a sort of bastard training in gentility, with *noblesse oblige* left out. Its teaching varies between flamboyant Imperialism and the doctrine that Jack is as good as his master. Where do we find taught the idea that, high and low, we are all members of one body, of one community—the State, the bloated rich quite as much as the unemployed, and that great mass of middle class English on whom the burden of taxation falls so heavily? In the great clock of Modern Society, the children of every class should be made to see the wheels go round. If both poor parents and poor children could see the works, they would realise that the aim of organised society is to see that there is a place for every one, and that every one is in his place—that is, the place that suits him best. They would also realise that while servility is out of place in a free nation, respect and reverence are its very life-blood. We want no cringing and capping, but we want respect for the noble men and women who, often at the sacrifice of themselves, are striving to make their children a credit to the State, while contributing, through the State, to the assistance of the children of their less fortunate brothers and sisters. We want no bowing and scraping, but we want an enlightened appreciation of what the other classes are doing, directly and indirectly, for the community. Whitechapel has got to understand the West End, quite as much as the West End has got to understand Whitechapel, and has got to realise its responsibility to the community. If these questions were approached from the right standpoint in our elementary schools, we should hear less of the mistress question or the servant question, and there would be fewer of the bright boys out of the Board Schools selling newspapers or drifting into other unskilled callings, when they might have entered more useful careers, because they have never had preached to them the gospel of work. By all means let us have a living wage. But the ideal of work is not money-grubbing, it is the satisfaction that arises from the profitable expenditure of that energy which is the hall-mark of health and strength; from the sense of overcoming that goes back to the days when man first started on his crusade to conquer animate and inanimate nature. The joy of achievement, the feeling of having accomplished something, the sense of not having lost a day, the conception that England expects me also to do my duty, expects me also to be a producer and not a parasite in the community—these should be the ideals of the school. Whereas we too often find that the acquisition of a smattering of book-learning is considered as raising one above the working classes (appalling misnomer!) and therefore raising one above what would normally be one's work, whether it be scrubbing mother's floor or cleaning father's boots.

To the Gospel of Work the school needs to add the commandment to be careful of the property of the State. In this way only will the child be careful of the property of others and of its own. As it is, the poor man's child is educated with no idea of the value of anything, from blotting-paper to his own soul. That which costs him nothing he naturally values at nothing; and Free Education is sometimes the one thing he looks on as a luxury he can take or leave as he pleases. At school a broken pen is immediately replaced from a gross-box, of which there are many more gross in the store cupboard. If Board School Brown breaks his compasses, a polite teacher supplies him with a new pair. If Rugby Brown breaks his, he probably

has to forego a fortnight's tuckshop to replace his tools. While pin-money means much to her young mistress, Mary Jane has been trained in a school where not only pins were free gratis and for nothing, but where everything from dumb-bells to electric light was without money and without price, and there was an occasional breakfast and dinner thrown in. What does she know, or care to know, of the value of food and light, china or linen? She has been, since the days of the infant school, largely catered for by a generous public, enjoying many things at other folk's expense, and valuing those things accordingly. Many a servant with five and twenty pounds a year and all found spends every penny on her dress and other petty needs. Then she starts married life, and the tragedy begins. She who would not demean herself by washing out her own dusters or polishing a stove now finds herself in sole charge of a cottage or a top back room. She who would not help the cook to dish up dinner on the kitchen-maid's night out now bitterly regrets she never learnt to cook a simple joint. She has vague memories of making egg-snow at the school cookery classes, but she can't for the life of her remember whether vanilla essence was a necessary ingredient or not. Her husband is an equally good example of the child being father of the man. Many a penny might he save by doing useful repairs at home. But the smattering of technical work he got at the evening class with its elaborate apparatus and machinery never taught him the miracles he could effect with half a dozen ordinary tools. If he had the sense to spend in buying a few planks and nails half the money he squanders in the public house, he might put up a few pegs and shelves which would make all the difference between order and disorder, comfort and discomfort. But school has taught him that when he is out of school his work is done, and he has taken the idea with him into his life. The fault is scarcely the fault of the teachers. It lies or has lain with those in authority, who in former times were supposed to give light and leading to the schools. It is doubtless not easy to introduce into children now the sense of duty to the community, of the gospel of work, and the sinfulness of waste. But unless these evils are combated in the growing generation it will be a black look-out for England in twenty years' time.

REVIEWS

GREEK AND LATIN

ONE of the best of the many series of Greek and Latin Classics for students is the University Tutorial Series published by the University Tutorial Press, Limited (University Correspondence College Press), 157 Drury Lane. The plan of the series is to give the best possible text, clearly printed, with an Introduction supplying a brief account of the author and his chief works, the circumstances in which he wrote, and, in certain cases, his style, dialect and metre, and Notes which (wisely) avoid parallel passages and controversial discussions, and lay stress on grammar and subject-matter. We have before us a specimen, Plato's *Crilo* (2s. 6d.), edited by Mr. A. F. Watt. The book is as good as could be, the work of a scholar with practical experience of the needs of scholars. Only in the most urgent cases does Mr. Watt trouble his pupil with *variae lectiones*.

There have been several recent additions to the invaluable *Scriptorum Classicorum Bibliotheca Oxoniensis*, published by the Clarendon Press, Oxford, at very moderate prices, running from 2s. to 10s. 6d., according to the size of the volumes and their publication in paper or cloth bindings, and on stout or India paper. We have before us four: *Bucolici Graeci* (Theocritus, Bion, Moschus, and other authors, known and unknown, whose surviving works have been attributed to one of these three), edited by Professor von Wilamowitz-Moellendorf; *Statii Silvae*, edited by Professor J. S. Phillimore; *Tibulli Carmina*, edited by

Professor J. P. Postgate; and Plauti *Comoediae*, ii. (*Miles Gloriosus*, *Mostellaria*, *Persa*, *Poenulus*, *Pseudolus*, *Rudens*, *Stichus*, *Trinummus*, *Truculentus*, *Vidularia*, *Fragmenta*), edited by Professor W. M. Lindsay. Each volume contains a Praefatio in Latin, a list of manuscripts and the text, with foot-notes of *variae lectiones*. Professor von Wilamowitz-Moellendorff's *Bucolici* includes paraphrases of the more obscure *Technopaegnia*, and concludes with *Argumenta Carminum*; Professor Postgate adds an *Index Nominum*, and Professor Lindsay an admirable *Schema Metrorum*. It is right that every word of introduction and comment in these invaluable volumes should be written in the language of European scholarship Latin, for they are a *κρημα ἐς δέλ* not to English speaking students and scholars only, but to the whole civilised world.

For clearness of printing and arrangement, brevity and completeness, fine scholarship and acute criticism, we must refer once again to Professor Wilamowitz-Moellendorff, whose well-known "Griechisches Lesebuch" is the foundation of Mr. E. C. Marchant's little *Greek Reader* (vol. i., Clarendon Press, Oxford). We remember with pleasure an old book, most of the stories in which concerned the doings of *μυῖος τις*, which combined amusement with instruction some thirty years ago. Mr. Marchant's selection from the German work comprises a number of *Maxims and Anecdotes* from Heraclitus, Democritus, and others, Dion Chrysostom's *Hunter*, the Battle between Alexander and Porus from Arrian, Strabo's description of Great Britain, Moschion's *Hiero's Galleon*, and Thucydides on Pausanias and Themistocles. He translates (and in spite of his deprecatory preface, translates well) the German Professor's admirable little introduction, and adds brief but important notes, founded on those contributed by Bruhn to the German work. This is a book we can recommend most cordially to schoolmasters for use in lower forms.

We have so often praised Messrs. Blackie's little Latin Texts, edited by Dr. W. H. D. Rouse, that we need spare little space to the Vergil, *Bucolicum Liber*, and *Aeneid VI.*, both edited by Mr. S. E. Winbolt (6d. net). The principle is, again, a good text (A. V. E., wherever possible, in other cases M.P. and R., preference being given to M.), and a brief introduction. Mr. Winbolt's Introduction is a piece of good work. We remember how the account of the extant manuscripts of a classical author used to add to our interest in his writings as linking him with actual life and making him "real," and the inclusion of this feature in these volumes is an admirable idea.

Messrs. Blackwood's Classical texts have the advantage of illustrations, another good way of bringing things home to schoolboys. The frontispiece to Mr. R. B. Burnaby's *Elegiac Selections from Ovid* (1s. 6d.) gives a view of the Circus Maximus (after Canina), and the palaces overlooking it from the Palatine; and he includes art-sources so wide apart as the *Bacchus and Ariadne* in the British Museum and a Greek vase by Duris in the Louvres. The notes on the illustrations are full of interest, though a little further detail might have been added. Boys would like, for instance, to know the meaning of *Septizonium*, and to understand the two reasons which induced Severus to build that remarkable structure. The introduction treats briefly and clearly of Ovid's life and works, and the notes to the text (which is that of the *Corpus*) are, both on matters of grammar and interpretation, sound and illuminating. Appendix i. on the Subjunctive, and ii. on Prosody and Metre.

A recent addition to the Cambridge University Pitt Press Series is *Horatius and other Stories* adapted from Livy by Mr. G. M. Edwards (1s. 6d.), whose "Story of the Kings of Rome" is clearly a popular book for and among beginners. Here he gives us (often in a simplified form) Livy's narratives of Horatius and the bridge, Mucius Scaevola, Cloelia, Lake Regillus, Coriolanus, the Fabii, and Fidenae, warning his readers in a neat introduction that it is not all gospel true, and explaining why more authentic records are

lacking. His notes, particular and general, are good, and there is a useful vocabulary.

We notice with pleasure a very good edition of Plautus: *Captivi* with Introduction, Notes and Vocabulary, by the Rev. J. Henson, M.A. (Blackie, 2s.) for the use of "moderately advanced students." His text is mainly Teubner; and he wisely refrains from filling in *hiatus*, except where *homoteleuton* gives a reasonable supposition that they were not intentional. His introduction gives a brief life of Plautus, a short chapter on the Roman Theatre, a note on the play, which might have been improved by expansion (e.g., it is useless to mention the Middle and New Comedy of Greece without saying what their characteristics were): then follow a sketch of the plot and two sections on the prosody and the metre—not entirely complete but ample for the purpose in view. In an Appendix comes a list of manuscripts with the more important *variae lectiones*, and the notes are printed and well chosen. The illustrations occurring in the text are very apt and useful.

FRENCH AND GERMAN BOOKS

WE must preface all notice of the French and German books that are before us with a word on Mr. Clouesley Brereton's sterling little volume (Blackie) on *The Teaching of Modern Languages with special reference to Big Towns*. The teaching of modern languages is taken much more seriously nowadays than ever before; and this book—the substance of which comes from three lectures delivered last year before the London School of Economics by the author, an Inspector to the Board of Education and other bodies—is both a symptom of the change and an aid to its development. The argument of Mr. Brereton's book is too close and its pages are too full of exact and practical detail to make any abbreviation of it possible in the space at our disposal: we can only record our conviction that every schoolmaster and every one concerned with the teaching of modern languages ought to study these one hundred and seven little pages with the greatest care. Mr. Brereton's position—to use his own phraseology—is somewhere about the Left Centre. That is, he is not on the side of the teachers on the old, orthodox, classical lines, who treat a modern language *perinde ac cadaver*, and parse, analyse and dissect it as they do a dead language. Nor is he one of the extreme reformers, who rule out all writing, even in phonetic script, in whose class-rooms no word of the mother-tongue is ever heard, and whose plan of teaching is the "animated phonograph" plan. Starting from a position somewhere between the two, but nearer to the reformers than the orthodox, he develops, in three able chapters, his ideas on the teaching of a foreign language, side by side with and supplementary to the teaching of the mother-tongue. His work shows not only a keen eye for the needs of students and the benefits that may, and should, accrue to them from proper teaching, but a personal experience of all systems, at home and abroad, which gives great practical value to his advice and opinion. We would earnestly commend his book to all whom it concerns.

From Mr. Brereton's little book we may pass straight to the Rossmann and Schmidt *French by the Direct Method* series, of which the edition for use in England is published by Messrs. T. C. and E. C. Jack. We have before us two volumes in that series: Part iii. (third year's course), which has been adapted and enlarged by Mr. Thomas Cartwright (2s. 6d.) and volume ii. of the Fourth Year's Course, which is a *Livre de Lecture*, by Mdlle. Hélène Vivier (2s.). The idea of the Rossmann and Schmidt course is too well known to need explanation. Translation, parsing, grammar, etc., are pushed as far as possible into the background. "Translation from the mother-tongue into the foreign language," says the German preface, "actually hinders the acquirement of the foreign tongue"; and "the too early consideration of the rules of grammar is . . . a hindrance and not a help to

the acquisition of the new language." The rules of its grammar, therefore, are minimised to the extent of including (and that in the third year's course, it must be remembered) "only its more important principles." The language, in fact, is to grow in the pupil, much as his mother-tongue grew in him: his surroundings are to be (in this case) French; the subject-matter of his lessons French; he is to be questioned in French and to answer in French: while by the aid of pictures (these volumes are both admirably illustrated) during his education in the foreign language his mind is to be kept in touch with the actual.

An admirable book, which, while giving the pupil a reasonable amount of assistance, still has for its main object the persuading him to use his own wits, is M. Eugène Perrot's *The Translation of French Unseens* (Ralph, Holland, 2s. net.). M. Perrot begins by impressing on his readers the necessity of reading, thinking, searching for clues and using their brains before they begin to write their unseen translation, and goes on to explain how much may be done by polishing, after the rough draft is written. His introduction comprises four heads, The Rough Translation, Polishing the Rough Translation, Style, and Translation of Prose and Poetry. Then come some well chosen examples and expositions of Difficulties in French Syntax; and then the extracts from French authors for unseen translation. These are admirably selected. By easy stages the pupil is led on from a very easy passage of Xavier de Maistre through increasing difficulties, till he ends with such pieces as an extract from the *Revue des Deux Mondes* on glass-making, and a very fairly stiff bit of Nodier. The vocabulary (which M. Perrot advises be used as little as possible—and for our own part we think it would have been better to omit it altogether) is good, and he has wisely avoided giving any notes to the pieces set.

To his "Nouvelle Grammaire Française" Mr. J. Gauchez Anderson has now added a little book of *Exercices de Grammaire Française* (Methuen, 1s. 6d.), which may also be used to supplement any grammar. The work is entirely in French, and the exercises are easily calculated to lead the pupil on, step by step, into the niceties of correct diction. The book will prove exceedingly useful for fairly advanced students.

Among the "readers" in French we particularly welcome the additions to the Clarendon Press "Oxford Modern French Series," under the editorship of M. Leon Delbos. There can be no question as to which side M. Delbos takes in the controversy on the teaching of modern languages. "The one object in learning a language should be," he writes, in the General Preface included in each volume of the series, "to become acquainted with the greatest thoughts. We have before us Balzac's *Les Chouans*, edited by Mr. C. L. Freeman (2s.), Stendhal's *Mémoires d'un Touriste*, edited by Mr. H. J. Chaytor, illustrated (2s.), Erckmann-Chatrian's *Histoire d'un Homme du Peuple*, edited by R. E. A. Chessex (3s.), and Nodier's *Jean Sbogar*, edited by D. M. Savory (2s.). Each volume contains a short (in Mr. Chessex's case a very short) biographical and critical introduction, and a few good grammatical and explanatory notes; and if only the covers of these volumes were not twice as ugly as they are serviceable, our praise of the series would be unqualified.

Among Messrs. Blackie's capital *Little French Classics* (which, by the way, are specially singled out for praise by Mr. Brereton in his book reviewed above) the newer volumes are About's *Les Jumeaux de l'Hotel Corneille*, edited by H. Havelock, and Mérimée's *Le siège de la Rochelle*, edited by J. E. Michell (4d. each) and Scribe's *Le Verre d'Eau*, edited by W. G. Etheridge (8d.), the last being one of the Supplementary series of complete plays edited on the same plan. The series, which is divided into three sections, junior, middle, and senior, is unique for combined cheapness and excellence.

Messrs. Macmillan send us La Bruyère's *Caractères*, adapted and edited by Eugène Pellissier (2s. 6d.), a new

volume in Siepmann's Classical French Texts, forming the first of a new section devoted to classical authors of the seventeenth and eighteenth centuries. In a general Preface Mr. Siepmann and Mr. Pellissier express their views on the value of the study of modern languages, and dwell, like Mr. Delbos, on the value of the literary training they can be made to supply. After a brief biographical and critical introduction, Mr. Pellissier gives his selection from the text; then come grammatical and explanatory notes and then a summary of the chief grammatical peculiarities occurring in the text, which shows the divergence between modern French and that of La Bruyère. The four Appendices give Words and Phrases for *viva-voce* Drill; Sentences on Syntax and Idioms for *viva-voce* Practice; Passages (not translated from the "Caractères") for translation into French, and subjects for Free Composition. The last is a new feature in the series, and (in good hands) should be very useful.

Among the German educational series published recently first place may not undeservedly be given to Blackie's *Little German Classics*, which is uniform in aim and general appearance with their *Little French Classics*. Already a dozen volumes of forty-eight pages each have been published, and some idea of the extent of the field covered by these books may be gathered from the fact that among the authors who have been drawn upon are Goethe, Kotzebue, Heine and Schiller. The notes are sufficiently numerous to be helpful without being of too much assistance.

Mr. C. S. Buchheim's first series of *Short German Plays* were so well received that he has been encouraged to produce a second, containing half a dozen playlets with from four to eight characters in each, equally suitable for reading in class or production on prize days at school. The language is simple but by no means unnatural, the speeches are short and therefore easily learnt.

A more advanced book is Mr. H. G. Spearing's *Combined German Reader, Writer and Grammar* (Clarendon Press). This book, as the compiler says, is not intended for very young pupils nor for self-instruction: it is essentially a class-book for those who have already had some grounding in grammatical principles. Mr. Spearing states in his introduction that one of the considerations that influenced him in compiling the book was that in learning a modern language beginners should acquire as soon as possible a large stock of common words by reading connected passages instead of isolated sentences. This plan has been studiously followed in the first pages of the book, but the exercises for translation from English into German (which are far more important than those for translation from German into English) do not run on the same lines. It is a pity that having started out on quite the right path Mr. Spearing was unable to keep to it.

We could wish that we had learned German from Mr. A. B. Hope Moncrieff's little *Stories from Grimm* (Blackie's Modern Language Series, 1s. 6d.) Here are a number of old favourite stories, "The Golden Goose," "Rumpelstiltskin," "Hans in Luck," and others, attractively set out in a little illustrated book, with a short introduction telling us a little about the brothers with the name so inappropriate to their works, and about the stories they introduced us to, a few notes to help us over difficulties in the translation, and a good vocabulary.

FORTHCOMING BOOKS

Messrs. Methuen announce for early publication a *Junior French Prose*, by R. R. N. Baron (2s.)

HISTORY

Three useful publications have been sent us after the plan of bound-up historical charts (a) *The Students' Guide Book to British History, Parts i.—iv., Mediæval to 1485*, 1s.; (b) *Salient Points in Modern History, British, European, and Colonial, 1485—1901*, 1s.; (c) *A Students' Note Book of European History, 1789—1815*, 2s. By J. S. Lindsey

(Heffer, Cambridge; Simpkin Marshall, London). The pages are quarto and the charts comprise schemes of study based upon the Best Books, Outline Sketches, Chronological Synopses, Select Bibliographies, Topical Reviews, Notable Topics, Suggestive Sayings, Typical Questions. The books are intended mainly as Historical Bradshaws, and once used will become indispensable. The information as to how to study and what to study in each section should prove invaluable. The teacher or independent student will derive great advantage by grading his work upon such a scheme. It is to be hoped that in future editions the publishers will see their way to strong linen bindings.

An amplified edition of the *Outlines of English History*, by George Carter, M.A., is published by Messrs. Relfe, and should prove useful (*History of England*, in three parts; part i., B.C. 55—1485 A.D., 2s.).

Messrs. Methuen are to be complimented on the speed with which they are issuing the School Histories of the various English counties. The print is good and the illustrations excellent. To know something of the town and country in which they live is the only intelligent commencement of Geography for children. It is also an excellent means of teaching local patriotism. These books are suitable for Geographies or Readers, for general knowledge lessons, and for the school library. The history of ancient games prove one of the most interesting sections of an interesting book. (*A School History of Surrey*, H. E. Malden, M.A., 1s. 6d.)

Messrs. Jack have learned the value of good printing, good paper, and coloured illustrations for children's books. Their Concentric Histories appear to be a happy blend of the useful and attractive. (*Our Island Story*, Step 3, British History as Cause and Effect, 1s. 6d.)

Old Testament History from the descent of Jacob into Egypt to the election of Saul by Geo. Carter, M.A. (Relfe 2s.) strikes us as an especially useful book. The text of such of the Bible narrative as is necessary is incorporated in the work. This is particularly useful in a period of biblical history where the chronological arrangement of events sometimes entails more hunting up of passages than young children are capable of without undue distraction.

GEOGRAPHY

The Historical and Modern Atlas of the British Empire by Messrs. Robertson and Bartholomew (Methuen, 4s. 6d. net) was originally planned to accompany Mr. George's Historical Geography of the growth and structure of Great Britain all over the world; it now includes a handy Gazetteer, alphabetically arranged with dates of the entry of each place or country into the Empire: there is a complete index to its numerous maps, which cover the whole of the Christian era chronologically, and a good deal of the globe geographically that we by no means possess or desire.

Messrs. Blackie's *Reader on Cumberland, Westmoreland, and Furness* (8d.) is printed in good clear type, but is rather heavy and unattractive in its method of putting a great deal of varied information before its readers.

We confess we do not know a school or a class in which *An Introduction to Practical Geography*, by Messrs. Simmons and Richardson (Macmillan, 3s. 6d.), could be used to good purpose. To find Practical Surveying, Geometrical Drawing, the Use of the Magnetic Compass, Map Reading, Marking and Projection, the Study of Wave Curves, and many other subjects all within the same cover is staggering, and the smattering of knowledge to be gained by a teacher from its perusal.

The second edition, revised by Mr. C. Atchley, of vol. ii. of the *Historical Geography of the British Colonies*, by Mr. C. P. Lucas (the Clarendon Press), deals copiously and ably with the West Indies, a part of the Empire, which, if we mistake not, will shortly acquire new importance in the eyes of the promoters of the Monroe doctrine, as

commanding the entrance to the new Panama Canal. The student is referred to many other authorities for further information, and to any candidate for the Colonial or Foreign Office this should be a most valuable aid. Clear maps illustrate each separate dependency.

Messrs. Jack have published *Europe in Round the World Series* (6d.). This, like the *Australasia* and *Our English Homes*, is intended to serve the purpose of a note-book in Elementary Schools or lower forms. Maps and Illustrations are included and for their purpose are all that can be desired. Inexperienced teachers must not, however, fall into the error of using these as cram-books, instead of as supplementing good oral lessons.

The World and Its People (British Empire), Nelson, 1s. 10d.) is in accordance with the latest scheme of the Board of Education. The Series abounds in good illustrations, many in colour, and all the books are well and strongly bound for class use. They will serve as interesting Readers, being in every case continuous stories.

FORTHCOMING BOOKS

Messrs. Methuen announce a second edition *History and Geography Examination Papers*, by C. H. Spence (2s. 6d.)

MATHEMATICS

Part VIII. of the *Council Arithmetic for Schools* by Mr. T. B. Ellery (4d. and 6d., A. and C. Black), contains many and miscellaneous problems, deals concisely and clearly with Discount and Present Worth, Square and Cube Roots, Chain Rule and gives methods of solving those maddening questions as to approaching trains, hands of a clock, rowing against a tide, which the schoolboy must expect to find in any Examination Paper.

The Three Term Arithmetic (T. C. and E. C. Jack, Book IV., 4d.) is drawn up in such a way that it will be useful both in those schools whose school year is divided into three terms and to those which aim at getting the year's syllabus completed in the first three quarters and utilising the last period for revision. Mr. Iliffe is a thoroughly practical teacher, and the book supplies examples for carrying out the requirements of the Board of Education as to measuring and weighing. The necessary metric quantities are given as a matter of course throughout the work and not in a forbidding separate chapter. There are worked exercises as specimens and these are clearly set out as on blackboards. The elementary graphic arithmetic is a feature of the book. The *Three Term Arithmetic* Part VIII. (5d.) starts with Recurring Decimals, deals with Mensuration, percentages, Proportion and so on. We cannot help thinking that not enough use is made of the Unitary System, as the Rule of Three does not encourage thinking to nearly the same extent. Still, this is a useful little book.

Mr. G. F. Smith, the author of *Continuous Mental Arithmetic* (Nelson's School and College Series, 2s.), has evidently a low estimate of the teacher's ability to follow out his ideas, since in addition to such a query as "How many pencils at $\frac{1}{2}$ each could I get for 2d.?" he further asks: "How many for 2½d.?" "How many for 5d.?" and gives the answer in each case! Reiteration is the right, nay, the only way to teach, but if the teacher cannot take the hint in one page he will not in a hundred. Nor does Mr. Smith give any help as to how new rules are to be tackled. Such a book is hardly necessary.

A New Trigonometry for Beginners, by R. F. D'Arcy, M.A. (Methuen and Co., 2s. 6d.), carries the subject as far as the solution of triangles. Graphical methods are employed throughout and, what is especially useful just now, the answers to the test papers are all based on four-figure logarithms. Mr. D'Arcy's explanations are clear and indicate experience of a certain class of pupils: thus he illustrates by diagrams the distinction between angles of elevation and depression which unaccountably perplex some minds.

READERS

Publishers seem to vie with each other in producing a never-ending succession of Readers. *The New Globe Readers* (Macmillan, 1s. 2d. etc.) are a wise combination of the continuous story in which sustained attention is fostered, and suitable short stories and extracts, complete in themselves, from such works as *Water Babies* and *Carrots*.

Blackie's Model Readers, to judge by the sample sent us (Book iii. 1s.), are in some respects better than any we have lately seen. The Poetry is singularly well chosen. The inclusion of complete episodes from *Tom Brown*, the *Story of Siegfried* and anecdotes of Michael Angelo are steps in the right direction, more especially as these are not mere snippets, but stories each of several chapters in length. The illustrations, some coloured, are plentiful and apposite; and one need say no more than that quite a large proportion bear the name of *Brock*. But there is, to our mind, one serious blemish on an otherwise excellent compilation. The reader receives a distinct mental shock in being suddenly transferred from the childhood of Mozart to a chapter on Potatoes, or from the romance of the Prince of the Lions to gruesome pictures and descriptions of the bat that flies by night. The tenor of Readers of to-day should surely be literary. With our Nature Lessons, Object-lessons and Elementary Science Lessons, and the special text-books on these subjects, there is no reason for the Reader proper being the incongruous medley it was a decade ago. The Model Readers rejoice in so brave a title that they must be above criticism, and a certain amount of rearrangement in a future edition would add fifty per cent. to their value.

Messrs. Blackie have issued a reprint of the first edition of *Palgrave's Golden Treasury* (Lyrics, etc., Book ii.) with notes, in good linen cover, at the marvellous price of 6d.

Messrs. Macmillan have added several to their excellent series of *English Literature for Secondary Schools*, varying from 1s. to 1s. 6d., according to size. Notes and Glossary by Fanny Johnson remind us that *Ivanhoe* (1s. 6d.) is a book for girls as well as boys, as also the charming pictures of scenes in which Rowena and Rebecca play moving parts. H. M. Buller, of Clifton College, has contributed scholarly Introduction and Notes to Macaulay's *Essay on Clive* (1s.). Upon this particular book of the series we must repeat a criticism made on some of the earlier numbers, that the size of the print is such as should make masters hesitate before placing it in the hands of young students who have often to work many hours by artificial light. The same remark applies to the edition of *Macaulay's Essay on Addison*, by R. F. Winch, which also labours under the serious defect of over-erudition. Nearly half the volume is given up to Notes, which is quite a disproportionate amount. The Tales from Scandinavian Mythology (*The Heroes of Asgard*, Keary, adapted by Earle, 1s. 6d.) is much better printed, and the illustrations are as delightful as the stories are fascinating. It might repay the publishers to remove the serious objection we have raised. These classics might then command a wider public than the school. Many would prefer to fill their shelves with these cheap copies of masterpieces rather than borrow more expensive copies from the lending library.

Messrs. Blackie have appreciated the true literary spirit in their edition of *Bacon's Essays* (E. H. Blakeney, M.A., 1s. 6d.). The Editor, a member of Trinity College, Cambridge, as was Bacon himself, has obviously performed a labour of love. The edition is bound in stiff boards, and is a handy size. The narrowness of the columns and print saves the eyesight, otherwise one would pardon a bulkier volume for the advantage of larger print.

Yet another *Henry V.*! (Jack's School and College Texts, 1s. 6d.) There is little new about the copy sent us, except the advantage that the notes are kept within reasonable limits, and that a very useful collection of questions set at recent examinations is appended; and attention is drawn to the most suitable passages for recitation. The

text is in large and clear type. The explanatory notes are in the form of footnotes.

Mr. Addis, who writes on *Style*, occasionally indulges in Hyperbole. His book is not without its value in spite of occasional pomposity. (*Style in Composition*, Allan and Son, 2s.)

The *Revision Grammar* of Mr. James Hammond (T. C. and E. C. Jack, 8d.) seems itself to stand in no small need of revision. To give formulæ and appendices as the only plural in use of formula and appendix is, to say the least incomplete. By an inexplicable blunder *since* is ranked as a co-ordinate conjunction. Mr. Hammond provides us with a metrical surprise in John Gilpin. "A trainband cap'tain eke' (sic) was he." *Luxurians* is not the Latin for *luxury*. Mr. Hammond's comment on blank verse is quite in the best nursery-governess style. He tells us that "As used by Shakespeare and Milton this simple vehicle of expression is so varied as to be made most musical and seductive." The picture of the Tree of Tongues is likely to produce in the learner's mind the confusion of Babel.

A *Sketch of English Literature* with lives and work of the chief authors by Miss S. M. Du Pré (Allman, second edition, 2s. 6d.) is a carefully compiled and well-balanced volume. It is less scrappy than most books of this kind, and, if used as the editor suggests as a basis for good oral lessons, should arouse the interest of scholars in this important subject.

Plays for Girls (Blackie 4d. each), by M. F. Hutchinson, deserve praise. They have the advantage of needing no male attire on the stage, and they are both literary and topical. The *Masque or Pageant of the English Trees and Flowers* is a quaint "conceit" or "pleasant fancy" of the Elizabethan period, and would serve as an introduction to the serious study of the Masque. *The Australian Cousin* is of quite another type; up-to-date, lively, humorous. There are only five characters, and the three scenes take place in the drawing-room.

Messrs. Blackie send us six more of their *English School Texts* (Highways and By-ways of Literature. Edited by W. H. D. Rouse, 6d.). Dr. Rouse is indefatigable as an Editor. Nearly thirty volumes are now ready. Yet there is no suspicion of hurried work. These reprints are from good texts and in modern spelling. No change is made from the original except where abridgment is necessary. Short introductions are the only additions to the text. There are no notes. The latest additions to the Series are *The Retreat of Sir John Moore*, *Napier's Peninsular War* (2 vols.), *The Taking of the Galleon*, *The Black Hole of Calcutta*, *History of Virginia*, *Trips to Wonderland from Lucian*. The series, indeed, shows sound judgment and very catholic taste and wide knowledge on the part of the editor. Other new volumes are Josephus, *The Siege of Jerusalem* (Lodge's translation, with some omissions, of Books VI. and VII.); a selection from Prescott's *Conquest of Peru*; a translation of *Sintram*; an abbreviated version of *The Voyage of Captain James*; the account of P. P. Huc and Gabet's residence in Lla-Ssa (1845-6) from W. Hazlitt's translation of Huc; Roe's journal (abridged) of his *Embassy to the Great Mogul* (1615) from Purchas, and a part of Cotton's translation of the *Adventures of Montluc*.

Blackie's English Classics is just increased by an edition of Chaucer's *Squire's Tale*, with Introduction and Notes by Arthur D. Innes (Black, 2d.). The longer the initial difficulties of Chaucer's language and spelling are put off, the worse they seem to grow, and it is a good thing that pupils should be helped over the crags and pitfalls as early in their careers as possible.

FORTHCOMING BOOKS

Messrs. Methuen announce *Easy Stories from English History* (1s.), by E. M. Wilmot-Buxton, author of "The Ancient World." Messrs. Ralph, Holland and Co. announce *Essays and How to Write Them*, by Avary H. Forbes (2s.); *The Rights and Duties of Citizenship*, by Frederick Peaker; *Chief Landmarks in European History*, by Avary H. Forbes; Shakespeare's *A Midsummer Night's Dream*, *Macbeth*, and

The Tempest, edited by C.W. Crook, interleaved for students' manuscript notes; Milton's *Paradise Lost*, edited by A. L. Conn, and Coleridge's *The Ancient Mariner* and *Christabel*, edited by Ernest Jenkins, these also interleaved.

THE USE OF THE STEREOSCOPE IN EDUCATION

It is many years now since Oliver Wendell Holmes wrote his famous articles on the stereoscope (which Wheatstone invented in 1838), and on sun-painting and sun-sculpture; and it is not a little surprising that the advantages of the stereoscope as a means of education are only now just beginning to be noticed. As a means of amusement, this instrument was high in favour years ago: most of us can recall old-fashioned houses in which it formed a prominent "ornament" (!) on the drawing-room table. And perhaps it was its use as a means of (very doubtful) amusement that militated against its employment in what one would have thought its obvious purpose—education. There was another objection—the fact that until the proper use of the instrument in education had been discovered and developed it did actually remain a means of trifling amusement, with no serious value in educational work.

That proper use has now, largely owing to the firm of Messrs. Underwood and Underwood, been discovered, and is being rapidly developed. But before examining the thorough and painstaking work of that firm we must spare a moment to notice the very great and vital improvements—the radical change in fact—which recent science and skill have worked in the stereograph, *i.e.*, the double photograph which is looked at through the stereoscope.

Of old, as all will remember, the representation as seen through the stereoscope was even at its best not generally satisfactory. Either a *miniature* or an *unnaturally magnified* representation, and in both cases a badly distorted perspective, cloudy and imperfect, was the usual result. Messrs. Underwood and Underwood realised at the outset that the stereograph for educational purposes must be *scientifically accurate* and by careful experiments they have been able to establish standards in their processes of production which result in making their stereographs represent scenes and objects *life size* and moreover an absolutely correct perspective in the *third dimension*.

Speaking from experience, the impression one gets when examining their stereographs is that the representations are far superior in every way to all other stereographic effects one has seen, and that for educational purposes their subjects are selected on very sound lines.

Through the stereoscope these stereographs present to the eye nothing more and nothing less than would impinge on the retina were the spectator standing on the spot occupied by the camera when each individual stereographic negative was made. The result, as applied to use in schools, is this, that when the pupil looks at stereographs of, say, a cotton-field or a pyramid, his sidelong vision being shut out by the hood of the stereoscope, he is no longer sitting in his school-room and looking at a picture, but he is, as it were, bodily transported to the scene itself, and sees everything of exactly the size it would be, were he standing in real life as far off from it as the camera was.

Still something more was necessary to clear the stereoscope from the charge of being an instrument for amusement only. Pictures are always useful in education, but the best pictures cannot rise to the position in educational value which is claimed for the stereograph by the firm we have mentioned. It remained to invent the right system for the use of these stereoscopes and stereographs.

The system advocated, and adopted now by a long list of schools where Messrs. Underwood's instruments and stereographs are in constant use, is that of practical ex-

periment, as it were a laboratory. The student who has to make a chemical compound for himself learns chemistry more quickly and nicely than the student who sees a master make it. That is the principle of the right use of the stereoscope. Take Messrs. Underwood and Underwood's series of "Industry and Commerce," sub-heading "Fibre." The pupil sees through the stereoscope not a view, but a scene, of negroes picking what looks like tufts of white wool off bushes. He is not told: "This is cotton"; but he is induced to say for himself where he is standing and what he sees. He makes his own experiments, in fact. In the same way, with "Set A," Physical Geography: he sees a hill, a cañon, an oasis, a glacier; and having once seen these amazing things, having been, as it were, present in the flesh, he will never forget the impression, nor the facts that he thus learns on the spot. He is made to think: introduced plump into the presence of something "real." Learning, in such conditions, loses half its terrors and more than doubles its value. And the stereograph is not merely a means of illustration: it becomes actually a new method of education.

This "Set A," Physical Geography, may serve us as an example of Messrs. Underwood and Underwood's system of preparing their many series of stereographs. In all, the set contains thirty-six stereographs, but eighteen of them are called "supplementary" and though most valuable, are not absolutely essential to the course. The eighteen "type," or essential, stereographs are as follows: Hill, Mountain, Niagara Gorge, Gorge in formation (Niagara), River (the Salzach), Plain, Desert, Coasts, Glacier (Gorner), Glacier (Mer-de-glace), Ice-fall (the ultimate fate of a glacier), Volcano in eruption, Lava-field, Lava-Cone, Geyser in eruption, Geyser with cone, Stalactites and Equatorial Telescope. Each of the "supplementary" stereographs follows one of the "types," and they include such subjects as Mountain-pass, Canal locks, Promontory, Oasis, Crevasse and Iceberg. All these, it must be remembered, are from photographs of actual places—which cease to be photographs and become solid realities when seen through the stereoscope.

It is obvious that no pains have been spared to make the series thoroughly representative, and developments and additions are made every day. Messrs. Underwood and Underwood very fairly claim to have invented a new use of the stereoscope, and also to have opened the way to a new method of teaching, which both theory and practice prove to be of the highest service and importance. A first glance at the catalogue is sufficient to show how thoroughly and widely they have organised the teaching of nearly every branch of education on these lines, and the number of the stereographs they have prepared on every conceivable subject is as surprising as the quality.

Into the commonly raised objection of expense we cannot enter in any detail here. But it is possible to say that the initial expense is not nearly so heavy as would be expected, and all kinds of ingenious devices for lowering it have been introduced by the firm. We heartily commend the system and its implements to the attention of all teachers.

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